

October 11, 2019



U.S. Department
of Transportation

East Building, PHH-30
1200 New Jersey Avenue S.E.
Washington, D.C. 20590

**Pipeline and Hazardous
Materials Safety Administration**

DOT-SP 20931

EXPIRATION DATE: 2021-07-31

(FOR RENEWAL, SEE 49 CFR 107.109)

1. GRANTEE: Department of Defense US Army Military Surface
Deployment & Distribution Command
Scott AFB, IL
2. PURPOSE AND LIMITATIONS:
 - a. This special permit authorizes the transportation in commerce of low production and prototype lithium ion batteries in non-specification packaging (spacecraft component). This special permit provides no relief from the Hazardous Materials Regulations (HMR) or the International Civil Aviation Organization's Technical Instructions for the Safe Transport of Dangerous Goods by Air (ICAO TI) other than as specifically stated herein. The most recent revision supersedes all previous revisions.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce.
 - c. This special permit serves as an "exemption" under section 1.1.3 of the International Civil Aviation Organizations Technical Instructions (ICAO TI) and as a "Competent Authority Approval" as defined under 49 CFR § 107.1.
 - d. No party status will be granted to this special permit.

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3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180 and the ICAO TI.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.185(a) and Section 2.9.3 of the ICAO TI in that the batteries are not of a type that have passed the criteria in Part III, subsection 38.3 of the UN Manual of Tests and Criteria.
5. BASIS: This special permit is based on the application of Department of Defense US Army Military Surface Deployment & Distribution Command dated August 16, 2019, submitted in accordance with § 107.117 and a determination that is necessary to prevent significant economic loss.
6. HAZARDOUS MATERIALS (49 CFR 172.101):

| Hazardous Material Description | | | |
|---|------------------------|-----------------------|---------------|
| Proper Shipping Name | Hazard Class/ Division | Identification Number | Packing Group |
| Lithium ion batteries contained in equipment <i>including lithium ion polymer batteries</i> | 9 | UN3481 | N/A |

7. SAFETY CONTROL MEASURES:

a. OPERATIONAL CONTROLS:

(1) Only low production lithium ion batteries, contained in with equipment, may be offered for transportation under the terms of this special permit. ("Low production" is defined as a production run of no more than 100 cells or batteries annually of a particular type.)

(2) The battery contained in equipment is comprised of six (6) 18650 cells contained in equipment (spacecraft) and rated at 86.1 Wh as described in the August 16, 2019 application and on file with the Office of Hazardous Materials Approvals and Permits Division (OHMSAPD).

(3) Cells and the battery contained in equipment must be protected against short-circuiting.

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(4) The battery contained in equipment must be equipped with an effective means of preventing dangerous reverse current flow for cells that are connected in parallel.

b. TESTING:

(1) Cells must be of a type that has been successfully tested in accordance with the UN Manual of Tests and Criteria, Sixth Revised Edition.

(2) The lithium battery contained in equipment must have passed testing described in the Department of Defense's application dated August 16, 2019 and on file with OHMSAPD.

c. PACKAGING:

(1) Each battery must be contained in equipment structurally designed for space launch application.

(2) The equipment containing the battery must be placed in a cushioned 1560 Pelican case shipping container.

(3) The net weight of batteries within each package must not exceed 12 kg.

d. MARKING: Each package covered under the terms of this special permit must be durably and legibly marked and displayed on a background of contrasting color with "DOT-SP 20931."

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of Paragraph (b) of § 173.22a, persons may use the packaging authorized by this special permit for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this special permit.

b. A person who is not a holder of this special permit, but receives a packaging covered by this special permit, may reoffer it for transportation provided no modification or change is made to the packaging and it is offered for transportation in conformance with this special permit and the HMR.

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- c. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle and cargo-only aircraft.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each aircraft used to transport packages covered by this special permit. The shipper must furnish a copy of this special permit to the air carrier before or at the time the shipment is tendered.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—"The Hazardous Materials Safety and Security Reauthorization Act of 2005" (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term "exemption" to "special permit" and authorizes a special

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permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this special permit are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this special permit must notify the Associate Administrator for Hazardous Materials Safety, in writing, of any incident involving a package, shipment or operation conducted under terms of this special permit.

Issued in Washington, D.C.:



for William Schoonover
Associate Administrator for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, East Building PHH-30, 1200 New Jersey Avenue, Southeast, Washington, D.C. 20590.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: Steve H/Stacy Grey